

WHAT IS CLAIMED IS:

1. A method of treating a patient, comprising the steps of:

providing a hyoid bone support, having a first arm and a second arm which are transformable from a moveable relationship with respect to each other to a fixed relationship with respect to each other;

attaching the first arm to a first part of a hyoid bone;

attaching the second arm to a second part of the hyoid bone;

changing the configuration of the hyoid bone, and

securing the support in the fixed relationship.

2. A method of treating a patient as in Claim 1, wherein the changing the configuration step comprises increasing a lateral distance between the first and second parts.

3. A method of treating a patient as in Claim 1, wherein the changing the configuration step comprises increasing an anterior-posterior distance between the first and second parts of a hyoid bone.

4. A method of treating a patient as in Claim 3, wherein the increasing the anterior-posterior distance of the changing the configuration step comprises inserting at least one spacer between the first and second parts of the hyoid bone.

5. A method of treating a patient as in Claim 3, wherein the increasing the anterior-posterior distance of the changing the configuration step comprises attaching a brace to the first and second arms of the hyoid bone support to expand the distance between the first and second arms of the hyoid bone support.

6. A method of treating a patient as in Claim 1, wherein the changing the configuration step is accomplished before at least one of the attaching steps.

7. A method of treating a patient as in Claim 1, wherein the changing the configuration step is accomplished following both of the attaching steps.

8. A method of treating a patient as in Claim 1, wherein at least one of the attaching steps comprises using a bone screw.

9. A method of treating a patient as in Claim 1, wherein at least one of the attaching steps comprises using a bone clip.

10. A method of treating a patient as in Claim 1, wherein at least one of the attaching steps comprises using a suture.

11. A method of treating a patient as in Claim 1, wherein at least one of the attaching steps comprises using an adhesive.

12. A method of treating a patient as in Claim 1, wherein at least one of the attaching steps comprises using a mechanical interfit between the hyoid bone and the hyoid bone support.

13. A method of treating a patient, comprising the steps of:
accessing a hyoid bone, having a first and a second greater horn spaced apart by a first distance;
increasing the space between the first and second greater horns to a second distance; and
restraining the first and second greater horns at the second distance.

14. A method of treating a patient as in Claim 13, wherein the accessing step comprises accessing a human hyoid bone.

15. A method of treating a patient as in Claim 13, wherein the accessing step is accomplished in a minimally invasive procedure.

16. A method of treating a patient as in Claim 13, wherein the increasing the space step comprises flexing the hyoid bone.

17. A method of treating a patient as in Claim 13, wherein the increasing the space step comprises separating the hyoid bone into at least two components.

18. A method of treating a patient as in Claim 13, wherein the increasing the space step comprises separating the hyoid bone into at least three components.

19. A method of treating a patient as in Claim 13, wherein the second distance is at least about 110% of the first distance.

20. A method of treating a patient as in Claim 13, wherein the second distance is at least about 120% of the first distance.

21. A method of treating a patient as in Claim 13, wherein the second distance is at least about 130% of the first distance.

22. A method of treating a patient as in Claim 13, wherein the restraining step comprises securing the hyoid bone to a hyoid bone support.

23. A method of performing hyoidplasty as in Claim 13, wherein the restraining step is accomplished without attaching an implant to the hyoid bone.

24. A method of treating a patient, comprising the steps of:

identifying a hyoid bone, having a first and a second greater horns and a midpoint on the hyoid bone half way between the ends of the first and a second greater horns such that a first line extending from the midpoint through an end of the first greater horn and a second line extending from the midpoint through an end of the second greater horn define an angle therebetween;

increasing the angle; and

securing the hyoid bone to retain the increased angle.

25. The method of treating a patient as in Claim 24, further comprising minimally invasively accessing the hyoid bone.

26. A method of treating a patient as in Claim 24, wherein the hyoid bone also comprises an arc length along the hyoid bone between the ends of the first and second greater horns; and the method additionally comprises the step of increasing the arc length.

27. An implant for attachment to a hyoid bone, comprising:

an implant body;

a first attachment zone configured for attachment to a first portion of a hyoid bone;

a second attachment zone configured for attachment to a second portion of a hyoid bone;

a connection between the first and second attachment zones which allows movement of the first and second attachment zones with respect to each other; and

a lock carried by the body, for fixing the relationship between the first and second attachment zones.

28. An implant for attachment to a hyoid bone as in Claim 27, wherein the connection comprises a flexible portion of the body.

29. An implant for attachment to a hyoid bone as in Claim 27, wherein the connection comprises a hinge.

30. An implant for attachment to a hyoid bone as in Claim 27, wherein the connection comprises a flexible element carried by the body.

31. An implant for attachment to a hyoid bone as in Claim 27, wherein the lock comprises a threaded shaft.

32. An implant for attachment to a hyoid bone as in Claim 27, wherein the lock comprises an interference fit.

33. A method of treating a patient, comprising the steps of:

providing a pharyngeal support, having a first arm and a second arm which are transformable from a moveable relationship with respect to each other to a fixed relationship with respect to each other;

positioning the first arm with respect to a first part of a pharynx;

positioning the second arm with respect to a second part of the pharynx;

changing the configuration of the pharynx, and

securing the support in the fixed relationship.

34. A method of treating a patient as in Claim 33, wherein at least one positioning step comprises an interference fit formed in a fascial plane in proximity to a pharyngeal wall.

35. A method of treating a patient as in Claim 34, wherein at least one positioning step comprises an interference fit formed in a fascial plane between two pharyngeal muscles.

36. A method of treating a patient as in Claim 35, wherein at least one pharyngeal muscle is a suprathyroid muscle.

37. A method of treating a patient as in Claim 35, wherein at least one pharyngeal muscle is an infrathyroid muscle.

38. A method of treating a patient as in Claim 33, further comprising attaching at least one arm to a part of the pharynx.

39. A method of treating a patient as in Claim 38, wherein the attaching step occurs before the changing the configuration step.

40. A method of treating a patient as in Claim 38, wherein the attaching step occurs after the changing the configuration step.

41. A method of treating a patient as in Claim 38, wherein the attaching step is performed using a tissue anchor.

42. A method of treating a patient as in Claim 38, wherein the attaching step is performed using a hook.

43. A method of treating a patient as in Claim 38, wherein the attaching step is performed using a suture.

44. A method of treating a patient as in Claim 38, wherein the attaching step is performed using a clip.

45. A method of treating a patient as in Claim 38, wherein the attaching step is performed using an adhesive.

46. An implant for positioning in a pharyngeal structure, comprising:

an implant body;

a first tissue contact zone configured for contacting a first portion of a pharyngeal structure;

a second tissue contact zone configured for contacting a second portion of a pharyngeal structure;

a connection between the first and second contact zones which allows movement of the first and second contact zones with respect to each other; and

a lock carried by the body, for fixing the relationship between the first and second contact zones.

47. An implant for positioning in a pharyngeal structure as in Claim 46, wherein at least one portion of the pharyngeal structure comprises a suprathyroid muscle.

48. An implant for positioning in a pharyngeal structure as in Claim 46, wherein at least one portion of the pharyngeal structure comprises a hyoid bone.

49. An implant for positioning in a pharyngeal structure as in Claim 46, wherein at least one portion of the pharyngeal structure comprises an infrathyroid muscle.